

Saint Paul Public Works Department 2009 Annual Report



















A Message from the Director:

We ended 2008 and began 2009 knowing that the City faced serious challenges ahead for funding our operations. Through the early part of 2009, City employees at all levels came together to solve our financial concerns and to deliver another year of customer service that is second to none. In so many ways, Public Works employees continue to rise to the challenges that face them. I offer the following few examples from the complete list:

Completed Residential Street Paving projects at

- -Magnolia/Earl
- -Cretin/Goodrich
- -Knapp/Raymond
- We are aggressively pursuing strategies to reduce our impact on the environment at the same time we keep our residents safe by managing our road salt use through new technologies and best practice strategies;
- We continue to work to keep our city assets free of graffiti, and we are testing new methods for graffiti prevention;
- We continue to see improvement in the health and safety of our workforce, reaching another significant reduction in workers' compensation costs and seeing productivity gains from more employees at work;
- We completed our first strategic plan in 15 years, focusing our attention on where we want our organization to be in the future;
- Completed contract administration and inspection of our large contractor completed rehabilitation of the St. Peter/Rondo storm sewer tunnel.
- Received the American Public Works Association's Exceptional Performance Award in Safety for our participation with law enforcement during the 2008 Republican National Convention.

Our work is not finished, some of the things we expect to accomplish in 2010 include:

- Approval of our ADA Transition Plan
- Completion of Phase I of best practice review
- Refinement of our published performance measures.
- Begin use of pavement management data.

Saint Paul Public Works employees are continually working to provide the most responsive services on an infrastructure network with a replacement value of more than \$1.25 billion. The health and transportation monies provided by Public Works lay the foundation for the Most Livable City in America.



BuilBoose

Mission Statement

To preserve and enhance infrastructure to ensure a safe and livable Capitol City for all.

Vision Statement

To be a recognized leader in providing public works services through: Responsive Services, Quality Facilities and Employee Pride.

Operating Principles

Within each of the visionary phrases above, we see much more. Responsive services includes a workforce that strives to always be effective at what we do and efficient in carrying those services out. Quality facilities does not just mean infrastructure that provides our customers trouble-free service but that we are committed to public and personal safety, and that our infrastructure design and maintenance will be progressive and forward thinking. Employee pride shall always mean that we are an organization made up of individuals that place the utmost value on their work product, who are of the highest integrity and who take pride in the diversity of our City and our workplace.

Customer Service Statement

Public Works' employees are dedicated to providing our customers professional, courteous and efficient service in a timely and respectful manner.

Stakeholders

The Saint Paul Public Works Department through its many services touches everyone that lives in, travels through or works in Saint Paul. This means that residents, business people and visitors benefit from the quality services we provide. Residents are provided excellent services at an affordable price; businesses benefit from the efficient transportation of their goods and services throughout the city or onward throughout the metropolitan region; and our visitors have their experience enhanced by trouble free travel to their destination.

Often, elected officials, bargaining unit partners, other city departments, partner organizations and the media are stakeholders in the work that we do or the information that we need to share.



Highlighted 2009 Projects

When you take a road trip, could you reach your destination without a map? Unless you have traveled that way many times before, I am guessing your answer to that question is no. For organizations looking into the future, no one would ever say we have traveled there before. Truly, to have any chance of getting where we want to go, we need a map. While it isn't sexy, and having an immediate impact on the street, Public Works needed to get our arms around our strategic direction for the future. We have not taken the time to reflect on that strategy for over 15 years, and our management team came together over the first half of 2009 to brainstorm, to argue and finally to agree how we want to move into the future. We have seven main strategic goals for our future. They are:

- Complete best practices;
- Implement and evaluate maintenance standards;
- Engage in more robust long-term capital planning;
- Be successful in succession planning;
- Obtain resources for our infrastructure needs;
- Get the right equipment and software in place; and
- Improve team building across the department.

The complete text of our Strategic Plan can be found on-line at http://www.ci.stpaul.mn.us/index.aspx?nid=3320.

The Strategic Plan is an aggressive document. Much work will be required at all levels if we want to look back five or seven years from now and say we accomplished our goals. Looking forward aggressively is the only way to get there. To improve, to innovate or to drive change, we need to challenge ourselves and drive for that change every day.

Urban camouflage – the latest innovation in graffiti prevention
Did you see the traffic signal controller box at Grand and Snelling as
you drove by? Chances are you didn't, but not for the reason that
you expect – that they are just so ubiquitous to our urban landscape
that you never gave it a second thought. You probably missed it
because of innovative and creative work done by our Traffic
Division staff.

During 2009 our Traffic staff worked with a private vendor to design and install "urban camouflage" on two traffic signal controller boxes as a beautification and graffiti deterrent project. While we may not be able to treat all boxes in the City in this way, it is a unique, whimsical and innovative way to prevent the graffiti that can be placed on an all-too-common part of our landscape.









Some may assume that during difficult economic times, we may not be willing to experiment and to find ways to reduce our eventual maintenance costs, but this is just one example of the creative juices that flow every day in Public Works.

Administration

2009 Achievements:

- Maintained AAA bond rating from Standard and Poor's Rating Service for \$9 million in Sewer Utility Revenue Bonds issued in 2009.
- Maintained Aa2 bond rating from Moody's Investors Service for \$9 million in Sewer Utility Revenue Bonds issued in 2009.
- Completed the American Public Works Association (APWA) best practices for the Accounting/Payroll Division.

2010 Division Outlook:

The Accounting/Payroll Division will continue working with the city's COMET (City Operations Modernization and Enterprise Transformation) project team to implement the city's new software system that will include a budget, finance, and human resource/payroll module. This project began in 2009 and the estimated completion time is mid-2012. Accounting/Payroll Division staff will be working with the project teams and the estimated time commitment is 15-25% for each employee participating in a specific project team.



Bridges

Bridges

In the 2009 calendar year the bridges division managed to construct the Rice St. bridge 62627 in only 90 days, and both of the Maryland Ave. bridges 6599 and 6600. All three bridges turned out to be successful reconstructions. We also managed to produce good design progress on our Lexington Ave. project. We had been facilitating the progress of the Green Stair replacement, but prior to construction this met an untimely end. We also managed to complete all of our typical inventory inspections and emergency maintenance obligations despite losing nearly 30% of our staff.

The 2010 calendar year has thus far consisted of completing design work for the Lexington Bikeway project. Construction for the Lexington project was anticipated for this year, but between difficulties with Xcel and a disconnect in communication between the bridge division and the water department the construction has been held off until spring 2011. We have done





Municipal Equipment

Manager: Ron Mundahl





further work with the Edgcumbe Bridge replacement, including the full federal review process, continued rigorous inspection, and the facilitation of the initial bridge replacement plan-set. We have also facilitated the reconstruction of Irvine Avenue and finished design work for the Morton steps. We are currently working on the design documents for the replacement of the Wheelock Parkway bridge. We also added Mike Engel to our staff this year which has been a large help with all of our in-the-field operations and particularly our bridge inspection.

Municipal Equipment

2009 Achievements:

During 2009 we continued to work with governmental agencies from the metropolitan area in attempts to work cooperatively in order to minimize costs and maximize our limited resources. The Municipal Equipment Division helped to organize a multi-agency group consisting of over 35 governmental agencies from around the metropolitan area. The first outcome was the metro-area, fixed price fuel contract issued by the State of Minnesota for use by the group. This group shall continue to meet in 2010 to work on other items/issues which may help reduce costs, improve services or decrease environmental impact.

During 2009 we placed two Ford F750 single axle plow/dump/patch trucks into fulltime service. These trucks are the first of a new size truck for Municipal Equipment. The 33,000 pound GVW is slightly smaller than our normal single axle trucks (36,000lbs) but is more maneuverable has better ergonomic features and is slightly less expensive than the larger trucks.

The annual surplus equipment auction was held in late September of 2009. These auctions have always been an excellent way to dispose or vehicles and equipment which are no longer usable to the City of Saint Paul. 2009 auction participants include; the Fire Department, Police Department, Parks, the Water Utility, Public Works and the City of Minneapolis (first time, six sedans). Total sales (before tax and fees) was \$99,190.00

This group shall continue to meet in 2010 to work on other items/issues which may help reduce costs, improve services or decrease environmental impact.

In 2008 we applied for and received an MEI (Minnesota Environmental Initiative) grant to install DOC (Diesel Oxidation Catalysts) units on 15 trucks (about \$14,000 parts & labor). We also applied for and were accepted into an MPCA grant program to install DOC units on an





additional 20 trucks (over \$20,000 value). Starting in January 2009 these units were installed and have been in service for most of the year without any problems or DOC related issues.

2010 Outlook:

We will continue to research ways to better provide equipment and other services to our customers. As budgets continue to become tighter, any savings we may be able to pass on to those who rent equipment or use any of the other services provided by Municipal Equipment will improve their ability to deliver services to the public.

We are continuing to research alternative fuels and vehicles which would be capable of meeting our fleet requirements while helping us to reduce costs and environmental impact

We have applied for funding in order to replace the makeup air system at Municipal Equipment. The new equipment will not only improve shop air quality and employee safety but will also reduce energy usage and operating cost.



2009 Accomplishments:

- Invested \$6.6 million in sewer lining using trenchless technology
- Completed final phase of St. Peter/Rondo tunnel rehabilitation
- Inspected 75 miles of sewers
- Continued the process of converting sewer records to an electronic format.
- Smoke tested the sanitary sewer system located within the Light Rail Corridor.
- Started the Stormwater Volume Reduction Inventory and Modeling Project.

2010 Outlook:

- Complete a storm sewer study in the Stryker Avenue and Dodd Road area in partnership with the City of West Saint Paul.
- Continue metering and smoke testing for the Inflow/Infiltration Reduction Program
- Maintain the current pace of the Sewer Lining Program
- Initiate multi-year rehabilitation of the St. Anthony Storm Tunnel System
- Complete design of the Phalen Wetland Enhancement Project
- Complete the sewer record conversion process.



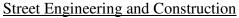
Sewer Utility

Manager: Bruce Elder, PE





Manager: Dan Haak, PE



2009 Accomplishments:

In 2009 our division completed the following projects:

- Earl McLean RSVP
- Knapp Raymond RSVP
- Cretin Goodrich RSVP
- Payne Ave Edgerton to Bush
- Sixth St. Maria to Sinnen
- Victoria St. Maryland to Arlington
- Selby Ave. Kent to Arundel

Completed the 2010/2011 CIB process.

Completed the second year of the sidewalk poetry program.

Started the Complete Streets concept.

Completed the Fillmore RR crossing, waiting for Federal approval to open to traffic.

Outlook for 2010:

- In 2010 we plan to pave 8.74 miles (.50 miles of this is for a MSA route)
- Data will be gathered and entered into the new pavement management program.

Street Maintenance Division

2009 Accomplishments:

- Purchased Salt Brine making machine for deicing operations.
- Retrofitted 10 salt spreaders to pre-wet salt with brine to make it more effective and allow us to use less salt. Also added two brine spray trucks for treating bridge decks with brine solution.
- Seal Coated all residential streets and west of Johnson Parkway and north of Margaret Street.
- Milled and Overlayed the following streets:

Grand Ave – Snelling to Lexington

Minnehaha – Lexington to Hamline

Lexington – Orchard to Larpenteur



Street Maintenance

Manager: Kevin Nelson, PE





Technical Services

Manager: Paul Kurtz, PE Outlook for 2010:

Continue Arterial Street Sweeping at ten times per season; and residential streets twice per year and alleys once per year.

Add capacity to salt brine making to include a "hot-mix" to be used in cold weather deicing.

Begin integration of new Pavement Management System into extraordinary maintenance planning and operations.

Add two heated pothole patching trailers to extend pothole patching into evening and night time operations.

Begin formal joint and crack sealing program for preventive maintenance.

Continued the Public Works Department effort to reduce workers compensation spending.

Technical Services Division

2009 Accomplishments

The Division of Technical Services successfully coordinated and managed the 2009 CIB Process for the Department of Public Works. This process established the capital program for the Department for years 2010 and 2011. More than 50 capital projects were presented to the Streets and Utilities Task Force and CIB Committee for their review and ranking. Technical Services staff accompanied the task force on a bus tour of all the projects so they could assess condition, ask questions, and physically see where the improvements would be made. The proposed 2010 capital budget for Public Works is nearly \$41M, which does not include any Federal funding the Department may obtain for projects.

A new function was added to the Technical Services Division in March of 2009 – Solid Waste and Recycling. Since the move, we have worked through Spring and Fall neighborhood clean-ups with the various district councils; coordinated with Eureka on special event recycling during the summer months; worked with Eureka on an amendment to their contract because of the downturn in the economy; and passed a residential recycling rate increase through Council for 2010. All of this was accomplished, plus day-to-day activities associated with solid waste and recycling, without any additional staff resources.



Technical Services completed the acquisition and installation of a new street level photography data set. This project also included high resolution, oblique angle aerial photography. These photos can be accessed through the City network on GISmo. They have proven very beneficial to those Departments of the City that need site information for property and project work.

Technical Services staff finalized corrections to the street centerline data set. This allows the data set to serve as the foundation for GASB 34 depreciation and the pending implementation of a pavement management system in the Department.

Technical Services staff furthered the implementation of AutoCAD Civil 3D for use in the Public Works Design Divisions (Paving, Sewers, Bridges, Survey and Traffic). Technical Services implemented AutoCAD Topobase as a tool to maintain sewer infrastructure records. A link has been provided from Topobase to GISmo for mass audience viewing.

Numerous data layers have been added to the GISmo system to provide additional information to users Citywide. Technical Services reorganized the catalog to provide a more common sense, easy to use, structure for users.

Technical Services assisted the street engineering division with writing the specifications and RFP's necessary for the purchase of the pavement management system and associated data collection effort. The pavement management system will help the Department develop its capital and maintenance programs.

Projects slated for 2010 include:

Technical Services will be leading an effort to make additional use of the Computerized Maintenance Management System (CMMS) within the Department. This will involve coordinating multiple divisions in projects designed to address existing workflows and to improve our ability to use the system as a source for decision making information.

Technical Services will also be coordinating the prototyping of an Automatic Vehicle Location (AVL) system. This system will provide real-time information about the location and operational status of Public Works fleet vehicles. Technical Services will be coordinating this effort with Public Works, Parks and the Office of Technology.

Technical Services will continue to coordinate and assist the Department in its quest for accreditation under the APWA Management Practices effort.





Traffic & Lighting

Manager: Paul St. Martin, PE

Traffic and Lighting

2009 Accomplishments

Budget

Traffic Division 240 Fund lost over \$1.4 million in 2007 and had negative fund balance of \$837,000 at end of 2007. Combination of staff reductions, service reductions, efficiency improvements, taking on additional construction projects and some additional maintenance revenue resulted in profit of \$550,000 in 2008 and \$1,000,000 in 2009, ending with a 2009 year end fund balance of \$715,000.

Central Corridor Light Rail Transit

Traffic Division was heavily involved in activities related to CCLRT.

Traffic Signal Construction by City Forces

Projects completed:

Shepard/I35E on Ramp Signal Construction

Plato/Wabasha Signal Reconstruction - partially funded by Ramsey County

Payne/Minnehaha Signal Reconstruction

Arlington/Jackson Temporary Signal (for Rice Street Bridge Detour)

Street Lighting Construction by City Forces

Projects completed:

Earl/McLean RSVP

Knapp/Raymond RSVP

First Half Magnolia/Earl RSVP

Cretin/Goodrich RSVP

Payne/Edgerton to Bush

Sixth - Maria to Sinnen

Victoria - Arlington to Maryland

Selby -Kent to Arundel

Other Projects

City Council approved Final Order for Right of Way acquisition for the Maryland/Rice Intersection Channelization Project which will be constructed by Ramsey County in 2011. The City Real Estate Division staff is working on completing the property acquisition work and Traffic Division staff will complete some of the design work. This project will include widening and addition of a left-turn lane on Maryland at Rice Street, which will improve safety and operations at the intersection. This intersection has second highest number of crashes citywide. Project to be implemented in 2011.





Traffic & Lighting

Manager: Paul St. Martin, PE We worked with Ramsey County to develop preliminary layout of Maryland Left Turn Lane installation and widening at Prosperity and Clarence Intersection.

Traffic Staff applied for and received 2013/2014 Federal Regional Transportation Enhancement Funds for Western Streetscape.

We assisted with the community process, plans and City Council Approval on Snelling Medians Project.

We also coordinated with Ramsey County Public Works on Maryland at Payne, and Maryland at Arkwright turn lane and safety improvements which also received federal funding for 2013/2014.

Non-Motorized Transportation Program

We made progress on federal process, design and community participation on the Marshall – Mississippi River to Cretin (\$626,300 of Federal Funds) and the Como-W City Limits to Raymond (\$418,800 of Federal Funds) NTP projects. Both projects will be implemented in 2010.

Highland Parkway Bike Boulevard Project was canceled due to community opposition.

We applied for and received \$750,000 of Federal Funds for Jefferson Bikeway. After much community input, project was approved by City Council and will be implemented in 2010 and 2011.

Energy Efficient Street Lighting

We continued to work with various manufacturers on testing energy efficient street lighting. We installed test lights on sections of Maryland Avenue, Thomas Avenue, Washington Street adjacent to Rice Park, and on St. Peter Street.

\$330,000 of City's Federal Energy Efficiency and Conservation Block Grant (EECBG) was allocated for retrofit of HPS globe style Ornamental Street lighting in downtown area with LED lamps. We completed application for funding and RFP for the retrofit in 2009. Retrofit will be implemented in 2010.

Accessible Pedestrian Signals/ADA Compliance

We applied for and received \$200,000 of Federal New Freedom Funding in 2009 for the installation of Accessible Pedestrian Signals in transit corridors, which is in addition to the \$100,000 we received in 2008. We installed Accessible Pedestrian Signals at several locations. Traffic staff also assisted with completion of Pubic Works ADA Transition Plan.





Manager: Paul St. Martin, PE

Paint the Pavement Locations Installed

Iglehart & Moore
Griggs between Stanford & Wellesley
Albert & Englewood
Sherburne between Griggs & Syndicate
Edmund & Syndicate
4th & Bates
Fry between Blair & Lafond
Albany & Albert

Safe Route to Schools

Traffic Division staff implemented \$50,000 Safe Routes to School federal grant at Bruce Vento, Dayton's Bluff, Jackson, John A Johnson and North End elementary schools on Safe Routes to School planning and safety education programs. All of the schools are within Invest St. Paul areas.

MnDOT Cooperative Agreement Funds

Traffic Division submitted applications for MnDOT Cooperative Agreement funding for traffic signal reconstruction at Arcade/Minnehaha and ADA improvements at signalized intersections on sections of Snelling Avenue.

Parking Meters

City of Minneapolis completed an RFP process for "High Tech" parking meters. Meters would be more customer friendly, have more reporting capability, flexibility and potentially increase revenues. Traffic Division staff assisted Minneapolis in evaluating the vendors and was involved on monitoring of the testing. We started to develop costs, funding options and recommendations for implementation of these meters in St. Paul.

Other Items

2010-2011 CIB Budget includes funding for two new programs, Traffic Sign Refurbishing Program and Street Lighting Infrastructure Program which will provide a funding source for life cycle replacement of those components of our infrastructure

Assisted Police Department on installation of security cameras in right of way under the Port Security grant. Traffic staff is completing work necessary to provide power to locations where cameras will be installed.

As part of the CIB Funded Bicycles Facilities Program, Traffic Division developed program for installing bike racks in the public right of way. Under program, interested property owner works with



Traffic Staff to coordinate type, location and installation of bike rack. City funds one half of cost and property owner funds the other half. Under program, 66 bike racks were installed on Grand Avenue in 2009. Chad Skally who initiated the Grand Avenue project received a Commuter Choice award from Met Council for his efforts on the project.

The Above Standard Lighting Districts were included in a new Class VII ROW Maintenance Assessment that will be included in annual ROW Maintenance Assessment and Billing. This will reduce mailing and administration costs and simplify payment for properties included in above standard lighting.

